

### Clean Copy of Amended Claims

1. Toothbrush with a toothbrush head supported by a toothbrush body; the toothbrush head comprising:

a bristle carrying bristle carrier, the bristle carrier rotatably supported for rotating about a rotation axis and adapted to be reversibly rotatably driven by an eccentric drive, wherein the eccentric drive has a drive shaft rotating in one direction and arranged perpendicular to the rotation axis of the bristle carrier and centrally extending through the toothbrush body, with an end face of the drive shaft having an eccentric pin, wherein the bristle carrier, has a guide bore or a guide channel extending in the axial direction, with the eccentric pin guided in the guide bore or said guide channel, wherein the bristle carrier is supported on the toothbrush head for movement in the axial direction and adapted to be reversibly driven by the eccentric drive so as to move backward and forward along a linear path, wherein the bristle carrier, has at least one drive pin channel which is disposed along a circumferential segment of the bristle carrier, and inclined in the axial direction, and wherein at least one drive pin which is guided in the drive pin channel, is disposed on the toothbrush head.

2. The toothbrush according to claim 1, wherein two diametrically opposed guide pins are disposed on the toothbrush head.

3. The toothbrush according to claim 1, wherein the guide channel is formed directly on the bristle carrier.

- THE UNIVERSITY OF CHICAGO**

8. Toothbrush with a toothbrush head supported by a toothbrush body, the toothbrush head comprising:

a bristle carrying bristle carrier, the bristle carrier rotatably supported for rotating about a rotation axis and adapted to be reversibly rotatably driven by an eccentric drive, wherein the eccentric drive has a drive shaft rotating in one direction and arranged perpendicular to the rotation axis of the bristle carrier and centrally extending through the toothbrush body, with an end face of the drive shaft having an eccentric pin, wherein the bristle carrier has a guide bore or a guide channel extending in the axial direction, with the eccentric pin guided in the guide bore or guide channel, wherein the bristle carrier is supported on the toothbrush head, for movement in the axial direction and adapted to be reversibly driven by the eccentric drive, so as to move backward and forward along a linear path, and the eccentric pin engages in a drive-pin bore or a guide channel, and is mounted axially fixed in the drive-pin bore or is axially moveable in the guide channel between limit stops.

9. The toothbrush according to claim 8, wherein the toothbrush head has at least one bearing channel adapted to engage with at least one corresponding bearing projection; which limits the backward and forward linear motion (stroke) of the bristle carrier.

10. The toothbrush according to claim 8, wherein a sliding block is provided which includes a drive-pin bore or a guide channel adapted to engage with the eccentric pin, and wherein the sliding block is axially affixed in the guide channel or axially moveable therein between limit stops.

11. The toothbrush according to claim 10, wherein the sliding block has a cylindrical shape.
12. The toothbrush according to claim 10, wherein the sliding block has a spherical shape.

11. The toothbrush according to claim 10, wherein the sliding block has a cylindrical shape.